Catalogue of American Amphibians and Reptiles.

Rose, Francis L. 1971. *Eurycea aquatica.*

Eurycea aquatica Rose and Bush
Dark-sided Salamander

Eurycea aquatica Rose and Bush, 1963:121. Type-locality, "small springs and permanent streams two miles west of Bessemer, Jefferson County, Alabama, along county highway 20." Holotype, U.S. Natl. Mus. No. 147138, collected 6 October 1962, by Francis L. Rose, Francis M. Bush, and James Jackson.

• Content. No subspecies have been described.

• Definition and Diagnosis. *Eurycea aquatica* is a plethodontid of moderate size (snout-vent length 28 to 48 mm, for transformed individuals) with a brownish dorsum, dusky black sides and a lightly stippled to immaculate venter. The dorsal light band extends to the tip of the tail and is bordered by the black edge of the lateral ground color. The legs are short but well developed with two to four costal grooves between the adpressed limbs. The tail (measured to the anterior angle of the vent) is usually shorter than the snout-vent length. The relative tail length (tail length divided by the snout-vent length) averages 0.94 (0.80 to 1.14).

Eurycea aquatica resembles *Eurycea bislineata* but differs from that species in being much stockier (especially the larger individuals), in having a shorter tail, few prevomerine teeth (6 to 15), fused nasal processes of the premaxilla (91%), and prominant prootic-squamosal crests. The dorsal light band of *E. aquatica* is brownish and that of *E. bislineata* is yellow in the area of sympatry. The lateral ground color of transformed *E. aquatica* varies from dusky brown to black; whereas, the dorso-lateral black stripes of *E. bislineata* are bordered dorsally and ventrally by yellow.

• Descriptions. The original description (Rose and Bush, 1963) is the only detailed account. Ashton (1966) lists eight characters in a key separating *Eurycea aquatica* from other species of *Eurycea.*

• Illustrations. The only illustrations of this species are drawings (Rose and Bush, 1963) of an adult and larva.

• Distribution. Rose and Bush (1963) record the species only from the area of the type locality. They suggested that the range might include northwest Georgia, southwest Tennessee, northeast Mississippi and northern Alabama. Ashton (1966) reported the species from Davidson County, Tennessee, and stated, "the species now has a known range in Tennessee covering the entire area east of the Tennessee River, and continuing to the eastern edge of the Cumberland Plateau." However, additional specific localities are lacking.

• Fossil Record. None.

• Pertinent Literature. The only published references to *Eurycea aquatica* other than the original description (Rose and Bush, 1963) are a brief mention of its occurrence in Davidson County, Tennessee with a key for its separation from *Eurycea bislineata* (Ashton, 1966), and a species account by Cochran and Goin (1970).

• Etymology. The name *aquatica* (Latin, *aquaticus*) refers to the preference of this species for aquatic habitats.

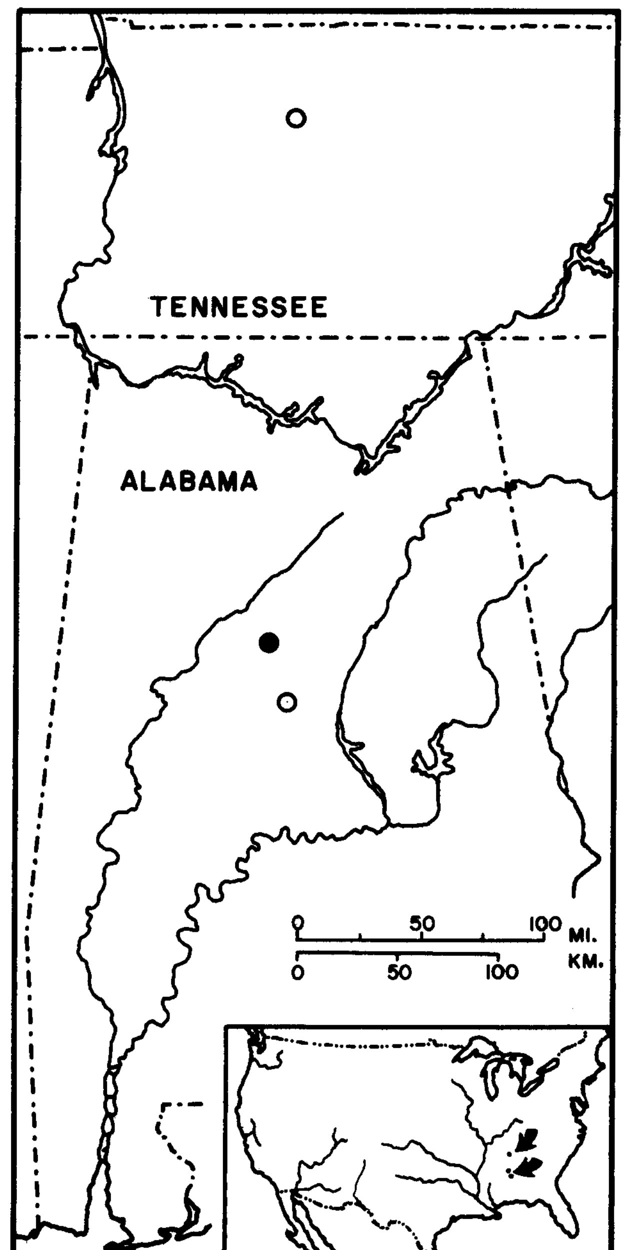
Comment

Apparently the closest relative of *Eurycea aquatica* is *E. bislineata*; however, large adult individuals of *E. aquatica* bear a greater superficial resemblance to members of the genus *Pseudotriton* than to large *E. bislineata.*

Comparisons of larval and newly-transformed individuals of *Eurycea aquatica* and *E. bislineata* are tenuous at best. Detailed study of morphological variation in both species is needed.

In the area of sympatry there is little difficulty in separating the larger transformed individuals of the two species. In other areas some of the characters are not valid: for example, in two specimens of *Eurycea bislineata* from North Carolina the nasal processes of the premaxilla are fused; however, these animals are slender and bright yellow with two broad well delineated dorsal stripes. I have never observed fused premaxillae or prootic-squamosal crests on *Eurycea bislineata* from the area of sympatry.

In about 4 per cent of transformed individuals of *Eurycea aquatica* the sides are light (not yellow) and in these the mid-



Map. The solid symbol marks the type-locality. Open circles indicate known localities for the species. The limits of the range are unknown.

dorsal light area is bordered by a thin serrated, dark line which blends into the lateral ground color. There is little reason to confuse this type of line with the broad, smooth stripe of *Eurycea bislineata.*

The springs in the area of the type-locality of *Eurycea aquatica* are very small and transformed animals in this area are virtually non-existent. Wholesale destruction of the springs was hastened by the discovery of endemic fish in the area and undisciplined herpetological collecting.

Literature Cited

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